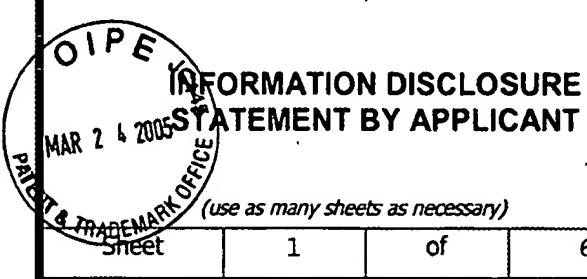


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Substitute for form 1449A/PTO

*Complete if Known*

			
Sheet	1	of	6
<b>Application Number</b> 09/920,341 <b>Filing Date</b> 08/01/2001 <b>First Named Inventor</b> Choi et al. <b>Group Art Unit</b> 2877 <b>Examiner Name</b> Sang H. Nguyen <b>Attorney Docket Number</b> PA17-07V06			

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document Number	Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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SN	J1	5,425,848		Haisma et al.	6/20/1995	
↑	J2	6,309,580	B1	Chou	10/30/2001	
↑	J3	6,391,217	B2	Schaffer et al.	5/21/2002	
	J4	2002/0177319	A1	Chou	11/28/2002	
	J5	6,713,238	B1	Chou et al.	3/30/2004	
	J6	6,518,189	B1	Chou	2/11/2003	
	J7	2004/0192041	A1	Jeong et al.	9/30/2004	
	J8	5,726,548		Chiba et al.	3/10/1998	
	J9	2002/0069525	A1	Hada et al.	6/13/2002	
	J10	5,508,527		Kuroda et al.	4/16/1996	
	J11	5,876,550		Feygin et al.	3/2/1999	
	J12	5,785,918		Hull	7/28/1998	
	J13	5,171,490		Fudim	12/15/1992	
	J14	6,828,244	B2	Chou	12/7/2004	
	J15	6,809,356	B2	Chou	10/26/2004	
	J16	5,737,064		Inoue et al.	4/7/1998	
↓	J17	2004/0197843	A1	Chou et al.	10/7/2004	
SN	J18	2004/0156108	A1	Chou et al.	8/12/2004	

Examiner Signature	<i>Sang H. Nguyen</i>	Date Considered	<i>04/09/05</i>
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\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449A/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				Application Number	09/920,341
Sheet	2	of	6	Filing Date	08/01/2001
				First Named Inventor	Choi et al.
				Group Art Unit	2877
				Examiner Name	Sang H. Nguyen
				Attorney Docket Number	PA17-07V06

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
SN	J19	2004/0137734	A1	Chou et al.	7/15/2004	
↑	J20	2004/0131718	A1	Chou et al.	7/8/2004	
	J21	2004/0118809	A1	Chou et al.	6/24/2004	
	J22	2004/0046288	A1	Chou	3/11/2004	
	J23	2003/0080472	A1	Chou	5/1/2003	
	J24	2003/0034329	A1	Chou	2/20/2003	
	J25	2002/0042027	A1	Chou et al.	4/11/2002	
	J26	6,636,311	B1	Ina et al.	10/21/2003	
	J27	6,383,888	B1	Stirton	5/7/2002	
	J28	2004/0033515	A1	Cao et al.	2/19/2004	
	J29	2004/0189996	A1	Sreenivasan et al.	9/30/2004	
	J30	6,630,410	B2	Trapp et al.	10/7/2003	
	J31	6,580,172	B2	Mancini et al.	6/17/2003	
	J32	10/670,980		Sreenivasan et al.	9/25/2003	
	J33	10/895,214		Voison	7/20/2004	
	J34	11/000,321		Nimmakayala et al.	11/30/2004	
↓	J35	4,512,848		Deckman et al.	4/23/1985	
SN	J36	6,791,669	B2	Poon	9/14/2004	

Examiner Signature	Sang H. Nguyen	Date Considered	09/09/05
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<p style="text-align: center;"><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p style="text-align: center;"><i>(use as many sheets as necessary)</i></p>			
Sheet	3	of	6
<b><i>Complete if Known</i></b>			
		<b>Application Number</b>	09/920,341
		<b>Filing Date</b>	08/01/2001
		<b>First Named Inventor</b>	Choi et al.
		<b>Group Art Unit</b>	2877
		<b>Examiner Name</b>	Sang H. Nguyen
		<b>Attorney Docket Number</b>	PA17-07V06

Examiner Signature	Saranya	Date Considered	09/09/07
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Substitute for form 1449A/PTO				<i><b>Complete if Known</b></i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				Application Number	09/920,341
				Filing Date	08/01/2001
				First Named Inventor	Choi et al.
				Group Art Unit	2877
				Examiner Name	Sang H. Nguyen
Sheet	4	of	6	Attorney Docket Number	PA17-07V06

## FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS							T <sup>4</sup>		
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document BG			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY			
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)					

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>					
Sheet	5	of	6	Application Number	09/920,341
				Filing Date	08/01/2001
				First Named Inventor	Choi et al.
				Group Art Unit	2877
				Examiner Name	Sang H. Nguyen
				Attorney Docket Number	PA17-07V06

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
SN	J52	Chou, Nanoimprint Lithography and Lithographically Induced Self-Assembly, MRS Bulletin, pp. 512 - 517, 7/1/2001	
	J53	Colburn et al., Step and Flash Imprint Lithography for sub-100 nm Patterning, Proceedings of SPIE Vol. 3997, pp. 453 - 457, 1/1/2000	
	J54	Johnson et al., Advances in Step and Flash Imprint Lithography, SPIE Microlithography Conference, 2/23/2003	
	J55	Chou et al., Ultrafast and Direct Imprint of Nanostructures in Silicon, Nature, Col. 417, (June 2002), pp. 835-837, 6/1/2002	
	J56	Chou et al., Nanoimprint Lithography, Journal of Vacuum Science Technoloy B 14(16), pp. 4129-4133, 11/1/1996	
	J57	Colburn et al., Development and Advantages of Step-and-Flash Lithography, Solid State Technology, 7/1/2001	
	J58	Colburn et al., Characterization and Modeling of Volumetric and Mechanical Properties for Step and Flash Imprint Lithography Photopolymers, Journal of Vacuum Science Technology. Vol b. 19(6), 11/1/2001	
	J59	Bailey et al., Step and Flash Imprint Lithography: Defect Analysis, Journal of Vacuum Science, B 19(6), pp. 2806-2810, 11/1/2001	
SN	J60	Bailey et al., Step and Flash Imprint Lithography: Template Surface Treatment and Defect Analysis, Journal of Vacuum Science, B 18(6), pp. 3572-3577, 11/1/2000	

Examiner Signature	<i>Sang H. Nguyen</i>	Date Considered	04/07/07
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STATEMENT BY APPLICANT***(use as many sheets as necessary)*

Sheet

6

of

6

Application Number	09/920,341
Filing Date	08/01/2001
First Named Inventor	Choi et al.
Group Art Unit	2877
Examiner Name	Sang H. Nguyen
Attorney Docket Number	PA17-07V06

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
SN	J61	Wronosky et al., Wafer and Reticle Positioning System for the Extreme Ultraviolet Lithography Engineering Test Stand, Emerging Lithography Technologies, Proceedings of SPIE Vol. 3997, pp. 829-839, 7/1/2000	
SN	J62	Schneider et al., Stripes of Partially Fluorinated Alkyl Chains: Dipolar Langmuir Monolayers,	

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INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

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Sheet

1

of

4

Application Number

09/920,341

Filing Date

08/01/2001

First Named Inventor

Byung J. Choi

Group Art Unit

2877

Examiner Name

Sang H. Nguyen

Attorney Docket Number

PA17-07V06

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		Number	Kinds Code <sup>2</sup> (if known)			
SN	I1	6,049,373		Miyatake et al.	4/11/2000	
	I2	2002/0094496	A1	Choi et al.	7/18/2002	
	I3	2002/0098426	A1	Sreenivasan et al.	7/25/2002	
	I4	2002/0150398	A1	Choi et al.	10/17/2002	
	I5	2004/0149687	A1	Choi et al.	8/5/2004	
	I6	2003/0215577	A1	Willson et al.	11/20/2003	
	I7	2004/0007799	A1	Choi et al.	1/15/2004	
	I8	2004/0008334	A1	Sreenivasan et al.	1/15/2004	
	I9	2004/0021254	A1	Sreenivasan et al.	2/5/2004	
	I10	2004/0021866	A1	Watts et al.	1/5/2004	
	I11	2004/0124566	A1	Sreenivasan et al.	7/13/2004	
	I12	2004/0141163	A1	Bailey et al.	7/22/2004	
	I13	2004/0163563	A1	Bailey et al.	8/26/2004	
	I14	2004/0251775	A1	Choi et al.	12/16/2004	
	I15	2004/0009673	A1	Sreenivasan et al.	1/15/2004	
	I16	2004/0022888	A1	Sreenivasan et al.	2/5/2004	
	I17	2004/0168588	A1	Choi et al.	9/2/2004	
	I18	2004/0086793	A1	Sreenivasan et al.	5/6/2004	
	I19	2004/0104641	A1	Choi et al.	6/3/2004	
	I20	2004/0168586	A1	Bailey et al.	9/2/2004	
	I21	2004/0169441	A1	Choi et al.	9/2/2004	
	I22	2004/0170771	A1	Bailey et al.	9/2/2004	
	I23	2004/0189994	A1	Sreenivasan et al.	9/30/2004	
	I24	2004/0209177	A1	Sreenivasan et al.	9/30/2004	
	I25	2004/0200411	A1	Willson et al.	10/14/2004	
SN	I26	2004/0053146	A1	Sreenivasan et al.	10/21/2004	

Examiner Signature

Sang H. Nguyen

Date Considered

04/11/05

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Substitute for form 1449A/PTO				Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				Application Number	09/920,341
				Filing Date	08/01/2001
				First Named Inventor	Byung J. Choi
				Group Art Unit	2877
				Examiner Name	Sang H. Nguyen
Sheet	2	of	4	Attorney Docket Number	

Examiner Signature	Sarah M.	Date Considered	04/11/05
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<p>Substitute for form 1449A/PTO</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p>(use as many sheets as necessary)</p>				<p><b>Complete if Known</b></p> <table border="1"> <tr> <td>Application Number</td> <td>09/920,341</td> </tr> <tr> <td>Filing Date</td> <td>08/01/2001</td> </tr> <tr> <td>First Named Inventor</td> <td>Byung J. Choi</td> </tr> <tr> <td>Group Art Unit</td> <td>2877</td> </tr> <tr> <td>Examiner Name</td> <td>Sang H. Nguyen</td> </tr> <tr> <td>Attorney Docket Number</td> <td>PA17-07V06</td> </tr> </table>		Application Number	09/920,341	Filing Date	08/01/2001	First Named Inventor	Byung J. Choi	Group Art Unit	2877	Examiner Name	Sang H. Nguyen	Attorney Docket Number	PA17-07V06
Application Number	09/920,341																
Filing Date	08/01/2001																
First Named Inventor	Byung J. Choi																
Group Art Unit	2877																
Examiner Name	Sang H. Nguyen																
Attorney Docket Number	PA17-07V06																
Sheet	3	of	4														

## **FOREIGN PATENT DOCUMENTS**

Examiner Signature	Sanderson	Date Considered	04/1/05
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Application Number	09/920,341
Filing Date	08/01/2001
First Named Inventor	Byung J. Choi
Group Art Unit	2877
Examiner Name	Sang H. Nguyen
Attorney Docket Number	PA17-07V06

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
SN	I35	U.S. App. No. 09/698317, filed 10/27/2000, entitled: High Precision Orientation Alignment and Gap Control Stages for Imprint Lithography Processes, naming Inventors Byung Choi et al.	
↑	I36	U.S. App. No. 10/614716, filed 7/7/2003, entitled: Conforming Template for Patterning Liquids Disposed on Substrates, naming inventors Sreenivasan et al.	
	I37	U.S. App. No. 10/785248, filed 2/24/2004, entitled: Method to Control the Relative Position Between a Body and a Substrate, naming inventors Sreenivasan et al.	
↓	I38	U.S. App. No. 10/864214, filed 6/9/2004, entitled: Imprint Lithography System to Produce a Light to Impinge upon and Polymerize a Liquid In Superimposition with Template Overlay Marks, naming inventors Sreenivasan et al.	
SN	I39	Abstract of Japanese Patent 63-194956	

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Sheet

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Application Number	09/920,341
Filing Date	08/01/2001
First Named Inventor	Choi et al.
Group Art Unit	2877
Examiner Name	Nguyen, Sang H.
Attorney Docket Number	PA17-07V06

### U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (If known)			
SN	G1	4,119,688		Hiraoka	10-10-1978	
	G2	4,208,240		Latos	06-17-1980	
	G3	4,707,611		Southwell	11-17-1987	
	G4	4,776,695		Van Pham et al.	10-11-1988	
	G5	5,048,960		Hayashi et al.	09-17-1991	
	G6	5,160,402		Cheng	11-03-1992	
	G7	5,270,222		Moslehi	12-14-1993	
	G8	5,335,066		Yamada et al.	08-02-1994	
	G9	5,374,327		Imahashi et al.	12-20-1994	
	G10	5,386,119		Ledger	01-31-1995	
	G11	5,403,433		Morrison et al.	04-04-1995	
	G12	5,493,401		Horie et al.	02-20-1996	
	G13	5,565,114		Saito et al.	10-15-1996	
	G14	5,643,364		Zhao et al.	07-01-1997	
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	G18	5,877,032		Guinn et al.	03-02-1999	
	G19	5,885,472		Miyazaki et al.	03-23-1999	
	G20	5,983,906		Zhao et al.	11-16-1999	
	G21	6,052,183		Lee	04-18-2000	
	G22	6,068,783		Szetser	05-30-2000	
	G23	6,278,519		Rosencaig et al.	08-21-2001	
	G24	6,278,809		Johnson et al.	08-21-2001	
	G25	6,297,880		Rosencaig et al.	10-02-2001	
	G26	6,304,326		Aspnes et al.	10-16-2001	
	G27	6,633,391		Oluseyi et al.	10-14-2003	
	G28	6,603,538		Oluseyi et al.	08-05-2003	
	G29	6,081,334		Grimbergen et al.	06-27-2000	
	G30	6,753,972	B1	Hirose et al.	06-22-2004	
SN	G31	2003/0133126	A1	Sarfatty et al.	07-17-2003	
Examiner Signature	<i>Sang H. Nguyen</i>			Date Considered	<i>07/11/05</i>	

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Substitute for form 1449A/PTO				<i>Complete if Known</i>	
				Application Number	09/920,341
				Filing Date	08/01/2001
				First Named Inventor	Choi et al.
				Group Art Unit	2877
				Examiner Name	Nguyen, Sang H.
(use as many sheets as necessary)				Attorney Docket Number	
Sheet	2	of	3	PA17-07V06	

## **FOREIGN PATENT DOCUMENTS**

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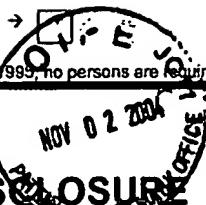
<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

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Sheet

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### Complete if Known

Application Number	09/920,341
Filing Date	08/01/2001
First Named Inventor	Choi et al.
Group Art Unit	2877
Examiner Name	Nguyen, Sang H.

Attorney Docket Number PA17-07V06

### OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
SN	G34	Communication Relating to the Results of the Partial International Search; International Appl. No. PCT/US2002/015551.	
↑	G35	Papirer et al., "The Grafting of Perfluorinated Silanes onto the Surface of Silica: Characterization by Inverse Gas Chromatography," August 1993, pp238-242, vol. 159, Issue 1.	
	G36	Abstract of Papirer et al., "The Grafting of Perfluorinated Silanes onto the Surface of Silica: Characterization by Inverse Gas Chromatography," August 1993, pp238-242, vol. 159, Issue 1.	
	G37	Hirai et al., "Mold Surface Treatment for Imprint Lithography," August 2001, pp 457-462, vol 14, No. 3.	
	G38	Abstract of Hirai et al., "Mold Surface Treatment for Imprint Lithography," August 2001, pp 457-462, vol 14, No. 3.	
	G39	Sung et al., "Micro/nano-tribological Characteristics of Self-Assembled Monolayer and its Application in Nano-Structure Fabrication," July 2003, pp. 808-818, vol. 255, no. 7.	
	G40	Abstract of Sung et al., "Micro/nano-tribological Characteristics of Self-Assembled Monolayer and its Application in Nano-Structure Fabrication," July 2003, pp. 808-818, vol. 255, no. 7.	
	G41	Roos et al., "Nanolithography with a Commercial 4 Inch Bond System for Hot Embossing," October 2001, pp. 427-435, vol. 4343.	
↓	G42	Abstract of Roos et al., "Nanolithography with a Commercial 4 Inch Bond System for Hot Embossing," October 2001, pp. 427-435, vol. 4343.	
SN	G43	Office Action for United States Patent Application 10/053,357 dated 12/16/2003	

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*Sang H. Nguyen*

Date Considered

04/11/05

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Application Number	09/920,341
Filing Date	08/01/2002
First Named Inventor	Choi et al.
Group Art Unit	2877
Examiner Name	Nguyen, Sang H.
Attorney Docket Number	PA17-07V06

### U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
SN	E1	4,070,116		Frosch et al.	01-24-1978	
	E2	4,600,309		Fay	07-15-1986	
	E3	4,848,911		Uchida et al.	07-18-1989	
	E4	5,074,667		Miyatake	12-24-1991	
	E5	5,148,036		Matsugu et al.	09-15-1992	
	E6	5,148,037		Suda et al.	09-15-1992	
	E7	5,151,754		Ishibashi et al.	09-29-1992	
	E8	5,179,863		Uchida et al.	01-19-1993	
	E9	5,376,810		Hoenk et al.	12-27-1994	
	E10	5,424,549		Feldman	06-13-1995	
	E11	5,670,415		Rust	09-23-1997	
	E12	5,743,998		Park	04-28-1998	
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	E14	5,948,219		Rohner	09-07-1999	
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	E17	6,326,627	B1	Putvinski et al.	12-04-2001	
	E18	2002/0132482	A1	Chou	09-19-2002	
	E19	2002/0167117	A1	Chou	11-14-2002	
	E20	6,482,742	B1	Chou	11-19-2002	
	E21	6,534,418	B1	Plat et al.	03-18-2003	
	E22	6,541,360	B1	Plat et al.	04-01-2003	
	E23	2003/0081193	A1	White et al.	05-01-2003	
	E24	2003/0080471	A1	Chou	05-01-2003	
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	E26	5,468,542		Crouch	11-21-1995	
	E27	5,366,851		Novembre	11-22-1994	
	E28	5,362,606		Hartney et al.	11-08-1994	
	E29	5,324,683		Fitch et al.	06-28-1994	
	E30	5,212,147		Sheats	05-18-1993	
	E31	5,458,520		DeMercurio et al.	10-17-1995	
	E32	5,453,157		Jeng	09-26-1995	
	E33	5,439,766		Day et al.	08-08-1995	
SN	E34	5,431,777		Austin et al.	07-11-1995	

Examiner Signature

*Sang H. Nguyen*

Date Considered

05/11/05

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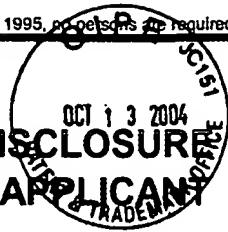
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Application Number	09/920,341
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First Named Inventor	Choi et al.
Group Art Unit	2877
Examiner Name	Nguyen, Sang H.
Attorney Docket Number	PA17-07V06

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		Number	Kind Code <sup>2</sup> (if known)			
SN	E35	5,422,295		Choi et al.	06-06-1995	
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	E37	5,417,802		Obeng	05-23-1995	
	E38	5,380,474		Rye et al.	01-10-1995	
	E39	5,374,454		Bickford et al.	12-20-1994	
	E40	5,330,881		Sidman et al.	07-19-1994	
	E41	5,328,810		Lowrey et al.	07-12-1994	
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	E43	5,244,818		Jokerst et al.	09-14-1993	
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	E46	5,108,875		Thackeray et al.	04-28-1992	
	E47	5,053,318		Gulla et al.	10-01-1991	
	E48	4,964,945		Calhoun	10-23-1990	
	E49	4,908,298		Hefferon et al.	03-13-1990	
	E50	4,921,778		Thackeray et al.	05-01-1990	
	E51	4,919,748		Bredbenner et al.	04-24-1990	
	E52	3,783,520		King	01-08-1974	
	E53	6,776,094	B1	Whitesides et al.	08-17-2004	
	E54	4,201,800		Alcorn et al.	05-06-1980	
	E55	4,426,247		Tamamura et al.	01-17-1984	
	E56	4,507,331		Hiraoka	03-26-1985	
	E57	4,552,833		Ito et al.	11-12-1985	
	E58	4,657,845		Frechet et al.	04-14-1987	
	E59	4,692,205		Sachdev et al.	09-08-1987	
	E60	4,707,218		Giammarco et al.	11-17-1987	
	E61	4,737,425		Lin et al.	04-12-1988	
	E62	4,808,511		Holmes	02-28-1989	
	E63	4,826,943		Ito et al.	05-02-1989	
	E64	4,857,477		Kanamori	08-15-1989	
	E65	4,891,303		Garza et al.	01-02-1990	
	E66	4,931,351		McColgin et al.	06-05-1990	
SN	E67	4,976,818		Hashimoto et al.	12-11-1990	
	E68	4,980,316		Huebner	12-25-1990	
Examiner Signature	<i>Sang H. Nguyen</i>			Date Considered	<i>04/11/05</i>	

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		Number	Kind Code <sup>2</sup> (if known)			
SN	E69	4,999,280		Hiraoka	03-12-1991	
↑	E70	5,071,694		Uekita et al.	12-10-1991	
	E71	5,169,494		Hashimoto et al.	12-08-1992	
	E72	5,173,393		Sezi et al.	12-22-1992	
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	E75	5,314,772		Kozicki et al.	05-24-1994	
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	E77	5,654,238		Cronin et al.	08-05-1997	
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	E82	5,926,690		Toprac et al.	07-20-1999	
	E83	5,948,570		Kornblit et al.	09-07-1999	
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	E85	6,096,655		Lee et al.	08-01-2000	
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	E87	6,245,581	B1	Bonser et al.	06-12-2001	
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	E91	6,387,783	B1	Furukawa et al.	05-14-2002	
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	E94	6,455,411	B1	Jiang et al.	09-24-2002	
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	E96	6,514,672	B2	Young et al.	02-04-2003	
	E97	6,561,706	B2	Singh et al.	05-13-2003	
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↓	E101	6,632,742	B2	Yang et al.	10-14-2003	
SN	E102	6,635,581	B2	Wong	10-21-2003	

Examiner Signature

*Sang Nguyen*

Date Considered

*08/11/05*

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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**Complete if Known**

Application Number	09/920,341
Filing Date	08/01/2001
First Named Inventor	Choi et al.
Group Art Unit	2877
Examiner Name	Nguyen, Sang H.
Attorney Docket Number	PA17-07V06

#### **U.S. PATENT DOCUMENTS**

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Filing Date	08/01/2001
First Named Inventor	Choi et al.
Group Art Unit	2877
Examiner Name	Nguyen, Sang H.
Attorney Docket Number	PA17-07V06

## FOREIGN PATENT DOCUMENTS

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Application Number	09/920,341
Filing Date	08/01/2001
First Named Inventor	Choi et al.
Group Art Unit	2877
Examiner Name	Nguyen, Sang H.
Attorney Docket Number	PA17-07V06

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
GN	E114	Abstract of Japanese Patent 63-138730	
	E115	Abstract of Japanese Patent 55-88332	
	E116	Abstract of Japanese Patent 57-7931	
	E117	Abstract of Japanese Patent 02-92603.	
	E118	Translation of Japanese Patent 02-92603.	
	E119	Abstract of Japanese Patent 02-24848.	
	E120	Translation of Japanese Patent 02-24848.	
	E121	HEIDARI et al., "Nanolithography at the 6 in. Wafer Scale," Journal of Vacuum Science Technology, Nov/Dec 2000, pp. 3557-3560, vol. B, no. 18(6)/	
	E122	NERAC.COM Retro Search, "Reduction of Dimension of Contact Holes", August 31, 2004	
SN	E123	NERAC.COM Retro Search, "Trim Etching of Features Formed on an Organic Layer", September 2, 2004	
SN	E124	NERAC.COM Retro Search, "Multi-Layer Resists", September 2, 2004	

Examiner Signature	Sang Nguyen	Date Considered	04/11/05
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Sheet

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<b>Application Number</b>	09/920,341
<b>Filing Date</b>	08/01/2001
<b>First Named Inventor</b>	Choi et al.
<b>Group Art Unit</b>	2877
<b>Examiner Name</b>	Nguyen, Sang H.
<b>Attorney Docket Number</b>	PA17-07V06

#### **OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
<i>GW</i>	E125	HU et al., "Flourescence Probe Technicques (FPT) for Measuring the Relative Efficiencies of Free-Radical Photoinitiators", s0024-9297(97)01390-9; "Macromolecules" 1998, vol. 31, no.13 , pp. 4107-4113, 1998 American Chemical Society. Published on Web 05/29/1998
<i>GW</i>	E126	FEYNMAN, Richard P., "There's Plenty of Room at the Bottom—An Invitation to Enter a New Field of Physics," 12 pp [online]Retrieved 9/23/04 from URI: <a href="http://www.zyvex.com/nanotech/feynman.html">http://www.zyvex.com/nanotech/feynman.html</a> .
<i>GW</i>	E127	CIBA SPECIALTY CHEMICALS BUSINESS LINE COATINGS, "What is UV Curing?", 45 pp [online]Retrieved 9/24/04 from URL: <a href="http://www.cibasc.com/image.asp?id=4040">http://www.cibasc.com/image.asp?id=4040</a> .

**Examiner  
Signature**

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Date  
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		U.S. PATENT AND TRADEMARK OFFICE		Application Number	09/920,341
(use as many sheets as necessary)				Filing Date	08/01/2001
				First Named Inventor	Choi et al.
				Group Art Unit	2877
				Examiner Name	Nguyen, Sang H.
Sheet	1	of	3	Attorney Docket Number	

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				Filing Date	08/01/2001
				First Named Inventor	Choi et al.
				Group Art Unit	2877
				Examiner Name	Nguyen, Sang H.
(use as many sheets as necessary)				Attorney Docket Number	PA17-07V06
Sheet	2	of	3		

## **FOREIGN PATENT DOCUMENTS**

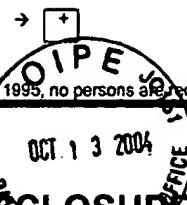
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<b>Application Number</b>	09/920,341
<b>Filing Date</b>	08/01/2001
<b>First Named Inventor</b>	Choi et al.
<b>Group Art Unit</b>	2877
<b>Examiner Name</b>	Nguyen, Sang H.
<b>Attorney Docket Number</b>	PA17-07V06

#### **OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

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				Attorney Docket Number	PA17-07V06

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>		Application Number	09/920,341
		Filing Date	08/01/2001
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Sheet	2	of	2

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